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TITLE: Ball grid array-typed substrate assembly and semiconductor package

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PATENT-FAMILY:

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ABSTRACTED-PUB-NO: KR2001038773A

BASIC-ABSTRACT: NOVELTY - Ball grid array-typed substrate assembly and a semiconductor package are to easily radiate the heat produced from a semiconductor chip by forming sink on the package.

DETAILED DESCRIPTION - A number of openings(21a) are formed on a substrate. A wire pad(22) is provided at a desired spacing on an edge of the opening, and one end of a wire(23) is bonded on the wire pad. At least one dam ring(24) is provided on the substrate(21), with the dam ring forming a band along the edge of the opening. A number of solder balls are attached to an outer surface of

the dam ring. The substrate is attached with a semiconductor chip(27) on a bottom thereof, and the other end of the wire is connected to the semiconductor chip through the opening. The semiconductor chip is attached with a heat sink(29) by an adhesive. The heat sink is made of a metal material to efficiently radiate the heat produced from the semiconductor chip. The dam ring is provided on an inner surface with a sealant(25) to protect a bonded portion of an exposed upper surface of the semiconductor chip from the exterior.

CHOSEN-DRAWING: Dwg.1/10

TITLE-TERMS:

BALL GRID ARRAY TYPING SUBSTRATE ASSEMBLE SEMICONDUCTOR PACKAGE

DERWENT-CLASS: U11

EPI-CODES: U11-E02A1;

